NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chemistry Gas Laws and Gases (Chapter 13 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words**

Boyle's Law-

Absolute Zero-

Charles's Law-

Gay-Lussac's Law-

Combined Gas Law-

Avogadro's Principle-

Molar volume-

Standard temperature and pressure (STP)-

Ideal Gas Constant (R)-

Ideal Gas law-

Respond to the prompts below:

What are the relationships between pressure, temperature, and volume of a constant amount of gas? Explain. (3 pts)

What are the properties of real gases and of ideal gases? Explain. (2 pts)

How does Avogadro's principle relate the number of particles of gas to the gas's volume? Explain. (2 pts)

How are the amount of gaseous reactants and products in a chemical reaction calculate? Explain (2 pts).

***ABOUT THE READING:***

Write three things that you learned about Gases*:*

***Make sure to write a full sentence.***

*Example: I learned that temperature is a measure of an object's kinetic energy.*

*1.*

*2.*

*3.*

Practice Problems **(not required, but recommended)***:*

*Chapter 13 assessment, problems #56-59, 67-70, 84-88*